IN THE SPECIFICATION

Page 5, after line 8, add the following two paragraphs:

Figures 4A-4P are tables that are helpful in understanding the present invention.

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Page 9, rewrite the paragraph at lines 13-14 as follows:

A detailed numerical example stepping through this process is provided in ~~Appendix A~~ the tables shown in Figures 4A-4P.

Rewrite the paragraph at page 9, line 21 to page 10, line 2 as follows:

Multiple channels could be combined in similar arrangements whereby the system bandwidth is increased by a factor equal to the number of combined channels. An example showing how this technique may be used to extend the bandwidth four times using four channels is shown in Figure 2. Figure 2 depicts a low side conversion. In this case, each frequency band in 201 (A, B, C & D) is translated down to be digitized by channels 1, 2, 3 and 4 respectively. The filter blocks shown (202) are optional. The goal is to sufficiently isolate the desired frequency band. This can be done, in this example, using a highpass filter, a bandpass filter or no filter at all. In the case of no filter, there will be "images" of the adjacent frequency band that will be digitized by the channel. These can be removed using DSP techniques in the recombination DSP block (203). This recombination technique is shown for a low side conversion (using three channels) in Figures 4A-4P ~~Appendix A~~.

Rewrite the paragraph at page 10, lines 3-15 as follows:

Another example of how this technique can be applied is shown in Figure 3. Figure 3 depicts a high side conversion. Careful inspection of Figure 3 will show that the major difference between Figure 2 and Figure 3 is the frequency used to "translate" the frequency band of interest into the frequency band of the acquisition channel. Figure 2 uses a frequency on the

low side of the band of interest (F_1 to translate frequency band "B" to the frequency band of the acquisition system) and Figure 3 uses a frequency on the high side of the band of interest (F_2 to translate frequency band "B" to the frequency band of the acquisition system). Note that the translated frequency band is "reversed" if high side conversion is used. That is, the highest frequency in frequency band "B" (F_2) becomes the lowest frequency in the translated band. This will be corrected in the reconstruction by using F_2 as the up-conversion frequency in the DSP reconstruction of the signal. This recombination technique is shown for a high side conversion (using two channels) in <u>Figures 5A-5P</u> ~~Appendix B~~.